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## **CURRICULUM VITAE**

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### *Curriculum vitae*

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#### **PERSONAL DATA**

Born: 10<sup>th</sup> of August 1956 in Bonn, NRW  
Address: Fraunhofer Institute for  
Molecular Biology and Applied Ecology (IME)  
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80799 Munich  
Germany  
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#### **EDUCATION**

Studies: Biology, University of Cologne / Max-Planck-Institute for Plant  
Breeding Research, Cologne Vogelsang, 1977-1984, Diploma 1984  
  
Dissertation: University of Cologne / Max-Planck-Institute for Plant Breeding  
Research, Cologne Vogelsang, Group of Dr. Koncz, Depart. Prof.  
Schell, 1984-1988

Habilitation: Rheinisch-Westfälische Technische Hochschule Aachen, 2001

## EMPLOYMENT

1984 - 1988: PhD student at the MPI for Plant Breeding Research in Cologne, Group of Prof. Otten (1984), Group of Prof. Willmitzer (1985), Group of Dr. Koncz (until 1988), Depart. Prof. Schell

1988-1993: Head of team at the Max-Planck-Institute for Biochemistry in Martinsried, Depart. Prof. Sanger

1993 - 1995: Max-Planck research stipend and head of team at the Max-Planck-Institute for Biochemistry in Martinsried, Depart. Prof. Sanger

1995 - 1998: DFG habilitation stipend and head of team at the Max-Planck-Institute for Biochemistry in Martinsried, Depart. Prof. Sanger

Since 1999: Fraunhofer Institute for Molecular Biology and Applied Ecology, Head of the Epigenetic department  
([http://www.ime.fraunhofer.de/molbio/abt\\_epigen/index.htm](http://www.ime.fraunhofer.de/molbio/abt_epigen/index.htm))

## MEMBERSHIPS

Society for Molecular Biology und Biochemistry (GMB)

## REGULAR REVIEWING

EMBO Journal, European Journal of Biochemistry, FEBS Letters, Journal of Cell Science, Journal of Virology, Molecular & General Genetics, Plant Biotechnology Journal, Plant Molecular Biology, RNA, Theoretical Applied Genetics, The Plant Cell, The Plant Journal, Transgenic Research, Trends in Plant Science, Trends in Plant Virology

Munich, 14<sup>th</sup> of April 2003

*Michael Wassenegger*

## PUBLICATIONS

### **Research Publications:**

**Wassenegger M., Heimes S., Riedel L. and Sänger H. L.** (1994). RNA-directed *de novo* methylation of genomic sequences in plants. *Cell* **76**: 567-576.

**Wassenegger M., Heimes S. and Sänger H. L.** (1994). An infectious viroid RNA replicon evolved from an *in vitro*-generated noninfectious viroid deletion mutant via a complementary deletion *in vivo*. *EMBO J.* **13**: 6172-6177.

**Riedel L., Pütz A., Hauser M.-T., Luckinger R., Wassenegger M. and Sänger H. L.** (1995). Characterization of the SRP RNA population of tomato. *Plant Mol. Biol.* **27**: 669-680.

**Riedel L., Volger U., Luckinger R., Pütz A., Sänger H. L. and Wassenegger M.** (1996). Molecular analysis of the gene family of the signal recognition particle (SRP) RNA of tomato. *Plant Mol. Biol.* **31**: 113-125.

**Wassenegger M., Spieker R., Riedel L., Thalmeir S., Gast F.-U. and Sänger H. L.** (1996). A single nucleotide substitution converts potato spindle tuber viroid (PSTVd) from a noninfectious to an infectious RNA for *Nicotiana tabacum*. *Virology* **226**: 191-197.

**Schiebel W., Péliissier T., Riedel L., Thalmeir S., Schiebel R., Kempe D., Lottspeich F., Sänger H. L. and Wassenegger M.** (1998). Isolation of a RNA-directed RNA polymerase-specific cDNA clone from tomato leaf-tissue mRNA. *Plant Cell* **10**: 2087-2101.

**Péliissier T., Thalmeir S., Kempe D., Sänger H. L. and Wassenegger M.** (1999). Heavy *de novo* methylation at symmetrical and non-symmetrical sites is a hallmark of RNA-directed DNA methylation. *Nucl. Acids Res.* **27**: 1625-1634.

**Péliissier T. and Wassenegger M.** (2000). A DNA target of 30 bp is sufficient for RNA-directed DNA methylation. *RNA* **6**: 55-65.

**Wassenegger M.** (2001). Advantages and disadvantages of using PCR techniques to characterize transgenic plants. *Mol. Biotech.* **17**: 73-82.

**Bonin M., Oberstrass J., Vogt U., Wassenegger M. and Nellen W.** (2001). Binding of IRE-BP to its cognate RNA sequence: SFM studies on a universal RNA backbone for the analysis of RNA-protein interaction. *Biol. Chem.* **382**: 1157-1162.

**Vogt U., Pütz A., Razvi F., Péliissier T. and Wassenegger M.** (2003). Viroid-mediated induction of post-transcriptional gene silencing. In preparation.

**Reviews:**

**Wassenegger M. and Pélassier T.** (1998). A model for RNA-mediated gene silencing in higher plants. *Plant Mol. Biol.* **37**: 349-362.

**Wassenegger M. and Pélassier T.** (1999). Signalling in gene silencing. *Trends Plant Sci.* **4**: 207-209.

**Bailey-Serres J., Rochaix J.-D., Wassenegger M., and Filipowicz W.** (1999). Plants, their organelles, viruses and transgenes reveal mechanisms and relevance of post-transcriptional processes. *EMBO J.* **18**: 5153-5158.

**Wassenegger M.** (2000). RNA-directed DNA methylation. *Plant Mol. Biol.* **43**: 203-220.

**Wassenegger M.** (2002a). Gene silencing. *Internat. Rev. Cytol.* **219**: 61-113.

**Wassenegger M.** (2002b). Gene silencing-based disease resistance. *Transgenic Res.* **11**: 639-653.

**Book Contributions:**

**Sanger H. L., Schiebel W., Riedel L., Pélassier T., and Wassenegger M.** (1996). The possible links between RNA-directed DNA methylation (RdDM), sense and antisense RNA, gene silencing, symptom-induction upon microbial infections and RNA-directed RNA polymerase (RdRP). In *Biology of Plant-Microbe Interactions*, G. Stacey, B. Mullin, and P.M. Gresshoff, eds. (St. Paul, MN: American Phytopathological Society), pp. 533-540.

**Wassenegger M.** (1998). Application of PCR to transgenic plants. PCR in Bioanalysis. In *Methods in Mol. Biol.*, **92**, S.J. Meltzer (Humana Press Inc., Totowa), pp. 153-164.

**Depicker A., De Buck S., Müller A. and Wassenegger M.** (2002). Transgene expression. In *Handbook of Plant Biotechnology*, in press.

**Patents:**

**US-Patent** (No.: 6,218,142B1): Nucleic acid molecules encoding polypeptides having the enzymatic activity of an RNA-directed RNA polymerase (RdRP). Date of Patent: 17. 04. 2001.

**EU Patent Application** (No.: 01 11 9348.9): Methods and means for gene silencing in transgenic plants. Submitted 2001.

**Talks:**

1994 - 2002: 25/22 (Home/Abroad)